Parents' Guide for Second Grade Mathematics

By the end of grade two, students understand place value and number relationships in addition and subtraction and they model simple concepts of multiplication and division. They measure quantities with appropriate units. They classify shapes and see relationships among them by paying attention to their geometric attributes. They collect and analyze data and verify the answers.

The following are specific skills students need to acquire by the end of grade two:

Number Sense and Operations
- Represent whole numbers up to 1000 in groups of 100's, 10's, and 1's using base ten models
- Read and write numbers 1 to 999 in expanded form
- Identify and represent the place value in a three-digit number
- Compare and order numbers using the terms *greater than*, *less than*, or *equal to*, and the symbols >, <, and =
- Identify odd and even whole numbers
- Divide shapes into two (halves), three (thirds), or four (fourths) equal parts
- Divide and identify sets of objects into halves, thirds, and fourths
- Represent the unit fractions 1/2, 1/3, and ¼
- Recall addition and subtraction facts to 20
- Model addition and subtraction of two- and three-digit whole numbers
- Write a number sentence to solve a story problem
- Identify and write addition and subtraction fact families
- Use properties of addition to model and solve problems – $(2 + 3) + 4 = 2 + (3 + 4)$
- Model and illustrate simple multiplication and division problems

Patterns
- Recognize, describe, create, and extend growing patterns
- Count by twos, threes, fives, and tens and recognize the pattern
- Recognize the difference between the symbols = and ≠
- Recognize that a symbol such as ☐ in an addition or subtraction equation represents a value that will make the statement true

Geometry, Measurement, and Data Analysis
- Describe and classify plane and solid geometric figures (i.e., circle, triangle, rectangle, square, trapezoid, rhombus, parallelogram, pentagon, hexagon, cube, sphere, cone)
- Describe the part-whole relationships, similarities, and differences within a shape
- Identify and use measurement units to measure length, weight, and capacity (i.e., inch and centimeter)
- Determine the value of coins to $1.00
- Tell time to the quarter-hour and sequence a series of daily events by time (e.g., breakfast at 7:00 a.m.)
- Collect, record, organize, display, and interpret data through graphs, tables, and charts